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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/207,361 12/08/98 ZUCKER

F RCA-89.291

EXAMINER

WM02/0117

JOSEPH S TRIPOLI
THOMSON MULTIMEDIA LICENSING INC
2 INDEPENDENCE WAY
POST OFFICE BOX 5312
PRINCETON NJ 08543

CHILK

ART UNIT

PAPER NUMBER

2651

DATE MAILED:

01/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/207,361

Applicant(s)

ZUCKER, FRIEDHELM

Examiner

Kim-Kwok CHU

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 10/27/2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☒ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Claim Objections

1. Claim 5 is objected to because of the following informalities:

(a) claim 5 needs to be canceled because it comprises features which have been already recited in claim 1.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.*

3. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Katayama et al. (U.S. Patent 5,530,685).

Katayama teaches a magneto-optical recording system having all of the elements and means as recited in claims 1-3, 5 and

6. For example, Katayama teaches the following:

- (a) an information erasing means 10' (Fig. 11);
- (b) an information writing device 9 and 10 (Fig. 11);
- (c) the writing device is formed from a writing magnet 10 and an optical scanning device 9 (Fig. 11);
- (d) the writing device overwrites information or data

recorded on a magneto-optical medium 11 (Fig. 11);

(e) the erasing means is formed by an erasing magnet 10' having a magnetic field which is directed opposite to the magnet 10 of the writing device (Fig. 11; Hinit and Hw are opposite magnetic fields);

(f) the erasing means 10' has a field strength Hinit sufficient to initialize the magneto-optical recording medium 11 (Fig. 11; inherent feature where Hinit is a magnetic field having field strength to initialize the magneto-optical recording medium);

(g) as in claim 2, the erasing magnet 10' has a mechanical connection to the writing device 9 and 10 (Fig. 11; inherent feature because said means 9, 10 and 10' are all supported by a mechanical connection, for example, head assembly);

(h) as in claim 3, a mechanical connection such as a join to connect 9, 10 and 10' (Fig. 1; inherent feature because said means 9, 10 and 10' are mechanically joined together within a head assembly);

(i) as in claim 5, the erasing means is formed by an erasing magnet 10' having a magnetic field which is directed opposite to the magnet 10 of the writing device (Fig. 11); and

(j) as in claim 6, the erasing magnet 10' is a permanent magnet (Fig. 11).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al. (U.S. Patent 5,530,685) in view of Tokita et al. (U.S. Patent 5,459,701) .

Katayama teaches a magneto-optical recording and reproducing device very similar to that of the instant invention. However, Katayama does not teach the following:

(a) the erasing magnet 10' is an electromagnet which can be deactivated.

Tokita teaches a magneto-optical recording method having an erasing magnetic field generating means made of either a permanent magnet or an electromagnet (column 6, lines 54-60).

A conventional erasing means in a magneto-optical information system is made of a permanent magnet. However, it can be replaced by an electromagnet as taught by Tokita. Hence, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an

electromagnet to replace a permanent magnet, because either the electromagnet and the permanent magnet are an equivalent magnetic means to generate a magnetic field.

In addition, an electromagnet has an advantage of deactivating its magnetic field. Hence, when there is a motivation of stop an erasing magnetic field, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an electromagnet as an erasing magnet, because the electromagnet can be deactivated when the erasing function is not needed.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al. (U.S. Patent 5,530,685) in view of Kamioka (U.S. Patent 5,493,548) .

Katayama teaches a magneto-optical recording and reproducing device very similar to that of the instant invention. However, Katayama does not teach the following:

- (a) a first optical scanning device for recording data;
- (b) a second optical scanning device for reproducing data; and
- (c) the two optical scanning devices are for simultaneously recording and reproducing data.

Kamioka teaches a magneto-optical recording and reproducing device having two optical scanning devices for

simultaneously recording and reproducing data (Fig. 1; column 9, lines 3-20).

It is well known that a plurality of scanning devices (read/write head) can be used to simultaneously read and write information/data on an optical recording medium. For example, Kamioka uses one read/write head for reading information while another head for writing data on an optical recording medium.

When a single read/write head such as Katayama's has a motivation of adding feature such as simultaneously read and write information/data to a magneto-optical device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Kamioka's multiple optical scanning (read/write head) devices to obtain simultaneously read and write information/data.

Even above modification of Katayama's single optical scanning device to Kamioka's multiple optical scanning devices is electrically not compatible, the one of ordinary skill in the art at the time the invention was made would have been easily redesign a circuitry to adapt such one scanning device to a multiple scanning devices modification.

Furthermore, even Katayama's recording medium and Kamioka's recording medium are different in physical shape, one of the ordinary skill in the art at the time the invention was made would have been easily overcome this problem by changing

the arrangement/position of optical scanning devices according to the physical shape of the recording medium.

Allowable Subject Matter

7. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claim 4, the prior art of record fails to teaches or fairly suggest means of a magneto-optical recording or reproducing device having an erasing magnet having a field strength sufficient to initialize a magneto-optical recording medium without the assistance of a laser beam.

9. Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

10. Any response to this action should be mailed to:
Commissioner of Patents and Trademarks Washington, D.C.
20231
or faxed to:
(703) 308-6308, (for formal communications intended for
entry)
Or:
(703) 308-6308, (for informal or draft communications,
please label "PROPOSED" or "DRAFT")

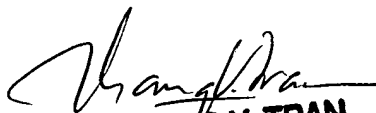
Hand-delivered responses should be brought to Crystal Park
II, 2021 Crystal Drive, Arlington. VA., Fourth Floor
(Receptionist).

Any inquiry of a general nature or relating to the status
of this application should be directed to the Group
receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Kim CHU
whose telephone number is (703) 305-3032.

1/9/2001
Kim-kwok CHU
Examiner AU 2651

January 9, 2001
(703) 305-3032


THANG V. TRAN
PRIMARY EXAMINER